

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addiese: COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,668	10/17/2003	Gregg L. Sheddy	TN-3305	2621
7550 11/06/2009 Black & Decker Inc. 701 E. Joppa Road, TW-199			EXAMINER	
			LEE, LAURA MICHELLE	
Towson, MD 21286			ART UNIT	PAPER NUMBER
			3724	
			MAILDATE	DELIVERY MODE
			11/06/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/688.668 SHEDDY ET AL. Office Action Summary Examiner Art Unit LAURA M. LEE 3724 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 12 August 2009. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-5.66-69.71 and 80-84 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-5,66-69,71 and 80-84 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 8/10/2009.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

Page 2

Application/Control Number: 10/688,668

Art Unit: 3724

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 4, recites wherein the base is formed as a tub, which is already set forth in claim 1. Claim 4 was previously cancelled and it appears was inadvertently brought back into prosecution.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao (U.S. Patent 6,263,866) in view of Greenland (U.S. Patent 6,276,990). Tsao discloses a saw (10) comprising: a base formed as a tub (sink, 21); a frame assembly (frame 22) disposed on the base (21); a first rail (224) disposed on the frame assembly, the first rail having a longitudinal axis and being adjustable in a direction lateral to the longitudinal direction (see the transversely elongated holes in Figs 1 and 4 and col. 2, lines 6-12); a saw assembly (25) disposed on at least one of the base (21) and the frame assembly (22), the saw assembly (25) comprising a support assembly (225), and a cutting wheel

Art Unit: 3724

(26) driven by the motor assembly (24), the cutting wheel having a plane substantially parallel to the pivot axis (); a table (23) slidingly disposed on the first rail (224) so as to be movable relative to the saw assembly (25) in a direction substantially parallel to the longitudinal axis; and a switch (switch 256) electrically connected to the motor assembly (24) and disposed on the support assembly (225) above the table and proximate to the motor assembly (22).

Tsao disclose not disclose that the blade is pivotable into angular positions and therefore does not disclose that the motor assembly (motor 24) is pivotally supported by the support assembly (225), the support assembly (225) remaining stationary relative to pivotal movement of the motor assembly (24) and the motor assembly (24) being pivotable about a pivot axis substantially parallel to the longitudinal axis. However, attention is directed to the Greenland tile saw. Greenland discloses an alternative configuration for the saw assembly, in which the saw assembly is positioned on a U-shaped frame, such that the saw and the motor assembly were pivotable in order to position the blade to make angular cuts in the workpiece. It would have been obvious to one having ordinary skill in the art to have substituted the cutting assembly of Tsao for the cutting assembly of Greenland for the similar benefit of providing angular cuts in the workpiece.

Therefore the modified device of Tsao discloses a motor assembly (Greenland 18) pivotally supported by the support assembly Greenland 16), the support assembly (Greenland 16) remaining stationary relative to pivotal movement of the motor assembly

Art Unit: 3724

(18) and the motor assembly (18) being pivotable about a pivot axis substantially parallel to the longitudinal axis.

In regards to claim 2, the modified device of Tsao discloses wherein the first rail (224) has a first end, and the table (23) is movable beyond the first end (table over hangs the rollers).

In regards to claim 3, the modified device of Tsao discloses wherein the table (23) is movable beyond the base (21) (table over hangs the rollers).

In regards to claim 4, the modified device of Tsao discloses wherein the base is a tub.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Greenland in view of Fuhrman et al. (U.S. Patent 6,637,424), herein referred to as Fuhrman. The modified device of Greenland discloses that the frame material may be comprised of steel or other rigid high strength materials of similar characteristics, but does not specifically disclose aluminum. However, it is old and well known to interchange steel members with aluminum and vice versa. Attention is also directed to the Greenland tile saw that discloses a similar setup to the Greenland tile saw, except that the frame is formed from aluminum instead of steel. As both steel and aluminum are well known structural elements and as both are known for fabricating the frame, and as aluminum is a strong and cheaply processed and easily malleable material, it would have been obvious to one having ordinary skill in the art at the time the invention was made to constructed the Greenland frame from aluminum instead of steel. Additionally

Art Unit: 3724

it is noted that since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

In addition, it is also noted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the frame from aluminum as aluminum is also a well known structural material that is generally cheaper than steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

5. Claims 66-68, 80, 82-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao (U.S. Patent 6,263,866) in view of Greenland (U.S. Patent 6,276,990). In regards to claims 66, 67 and 80, Tsao discloses a saw (10) comprising: a base formed as a tub (sink, 21); a frame assembly (frame 22) disposed on the base (21); a first rail (224) disposed on the frame assembly, the first rail having a longitudinal axis and being adjustable in a direction lateral to the longitudinal direction (see the transversely elongated holes in Figs 1 and 4 and col. 2, lines 6-12); a saw assembly (25) disposed on at least one of the base (21) and the frame assembly (22), the saw assembly (25) comprising a support assembly (225), and a cutting wheel (26) driven by the motor assembly (24), the cutting wheel having a plane substantially parallel to the pivot axis (); a table (23) slidingly disposed on the first rail (224) so as to be movable relative to the saw assembly (25) in a direction substantially parallel to the longitudinal

Art Unit: 3724

axis; and a switch (switch 256) electrically connected to the motor assembly (24) and disposed on the support assembly (225) above the table and proximate to the motor assembly (22).

Tsao disclose not disclose that the blade is pivotable into angular positions and therefore does not disclose that the motor assembly (motor 24) is pivotally supported by the support assembly (225), the support assembly (225) remaining stationary relative to pivotal movement of the motor assembly (24) and the motor assembly (24) being pivotable about a pivot axis substantially parallel to the longitudinal axis. However, attention is directed to the Greenland tile saw. Greenland discloses an alternative configuration for the saw assembly, in which the saw assembly is positioned on a U-shaped frame, such that the saw and the motor assembly were pivotable in order to position the blade to make angular cuts in the workpiece. It would have been obvious to one having ordinary skill in the art to have substituted the cutting assembly of Tsao for the cutting assembly of Greenland for the similar benefit of providing angular cuts in the workpiece.

Therefore the modified device of Tsao discloses a motor assembly (Greenland 18) pivotally supported by the support assembly Greenland 16), the support assembly (Greenland 16) remaining stationary relative to pivotal movement of the motor assembly (18) and the motor assembly (18) being pivotable about a pivot axis substantially parallel to the longitudinal axis, wherein the support assembly (Greenland 16/26)comprises a generally U-shaped member (16) having first and second legs (top

Art Unit: 3724

and bottom horizontal portions) and the motor assembly (22) pivotally supported by the first and second legs via guard 26.

However, the modified device of Tsao still does not disclose that the location of the switch is such that the switch is disposed on the generally U-shaped member. However, attention is also directed to the Lee, Jameson, Weissman, Mayfield, Rueb, Welch, Greenland, and Gorgol et al. references. These references are cited as cumulative evidence that it is well known in the art to locate the power switch for a cutting tool almost anywhere on a saw. Thus, even though the specific location of the switch that Applicant is claiming is not specifically taught, the indication from the prior art is that the location of the switch would have been an obvious matter of design choice dependent on the suitability of that location for whatever desired reason, such as dexterity, eye coordination, or standing position of the operator, ease of manufacturing, or position of the work piece and/or product. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to have provided a switch on the saw as claimed, such as on the supporting arm, 16, as suggested by Lee, Jameson, Weissman, Mayfield, Rueb, Welch, Greenland, and Gorgol et al. on the Tsao device in order to accommodate dexterity, eye coordination, or standing position of the operator, ease of manufacturing, or position of the workpiece and/or product.

In addition, it is also noted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the switch in an alternative location in order to accommodate dexterity, eye coordination, or standing position of the operator, ease of manufacturing, or position of the work piece and/or product since it

Art Unit: 3724

has been held the shifting of parts to different positions is a known variable. *In re Japikse*. 86 USPQ 70 (CCPA 1950).

In regards to claim 80, the modified device of Tsao discloses a support member (supporting 16, see Figs 3/4) disposed on at least the base and the frame assembly and a generally u-shaped member (16).

In regards to claim 82-84, the modified device of Tsao discloses wherein the switch is disposed on the support assembly (Greenland, 16), so that when the motor assembly (Greenland 24)is pivoted about the pivot axis, the support assembly and the switch remain stationary relative to the pivotal movement of the motor assembly.

6. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao in view of Greenland (U.S. Patent 6,276,990), Lee (6,272,961), Jameson (3,777,792), Weissman (4,885,965), Mayfield (5,063,806), Rueb (5,577,428), Welch (5,906,538), Greenland (6,080,041), and Gorgol et al (6,273,081) and in further view of McCambridge et al. (U.S. Patent 4,350,193), herein referred to as McCambridge, Marcoux et al. (U.S. Patent 3,342,226) Brenta (U.S. Patent 4,105,055), Sanfillipo (U.S. Patent 6,745,803) and Otto (U.S. Patent 5,161,590). The modified device of Tsao discloses the use of an electrical plug mounted to the support member to power the saw from a wall outlet, but not disclose that the end of the plug/cord is instead terminated at an electrical outlet. However, attention is directed to the McCambridge, Marcoux, Brenta, Sanfillip and Otto reference that all discloses work tables with directly incorporated outlets. These references are cited as cumulative evidence that it is well

Art Unit: 3724

known in the art to utilize an outlet on a worktable such as shown by Greenland instead of directly engaging the power tool with an AC wall outlet. The outlets provide available and convenient electrical power for utilization with a plurality of tools at the same time, such that only a single cord is required to run to the wall outlet, instead of two cords to operate both the pump and the motor of the saw. It similarly would have been obvious to one having ordinary skill in the art to have incorporated an outlet into the Tsao support instead of the plug as taught by McCambridge, Marcoux, Brenta, Sanfillip and Otto to minimize the number of cords to power the pump and saw motor plugged into a wall outlet or to power additional tool attachments.

7. Claims 71 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao in view of Greenland (U.S. Patent 6,276,990), Lee (6,272,961), Jameson (3,777,792), Weissman (4,885,965), Mayfield (5,063,806), Rueb (5,577,428), Welch (5,906,538), Greenland (6,080,041), and Gorgol et al (6,273,081) and in further view of Sigetich et al. (U.S. Patent 4,428,159) The modified device of Tsao discloses the claimed invention except is silent as to the type of switch and therefore does not appear to disclose that the switch comprises a single throw, double pole switch (i.e. a toggle switch) although Greenland does discloses that a second means may be provided to automatically turn on the motor as a tile is moved toward the motor assembly, and also a manual switch 28 may also be provided; see col. 3, lines 25-30. However, as Greenland is silent as to the type of switch, it would speculative to positively state that Greenland discloses a toggle switch. However, attention is directed to the Sigetich tile

Art Unit: 3724

saw cutter which utilizes a toggle switch (51) to energize and de-energize the motor 31 and the pump 53 at the same time. As Greenland also incorporates the use of a pump, but is silent as to how the pump and motor are triggered to operate together and as toggle switches are old and well known in the art for providing on/off connections, it would have been obvious to one having ordinary skill in the art to have incorporated a wiring system such that a toggle switch was incorporated (if not already) such that the coolant pump would operate in sync with the motorization of the saw blade for turning the power on/off.

Response to Arguments

 Applicant's arguments with respect to claims 1, 66, and 67 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3724

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA M. LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura M Lee/ Examiner, Art Unit 3724 11/02/2009 /Boyer D. Ashley/ Supervisory Patent Examiner, Art Unit 3724